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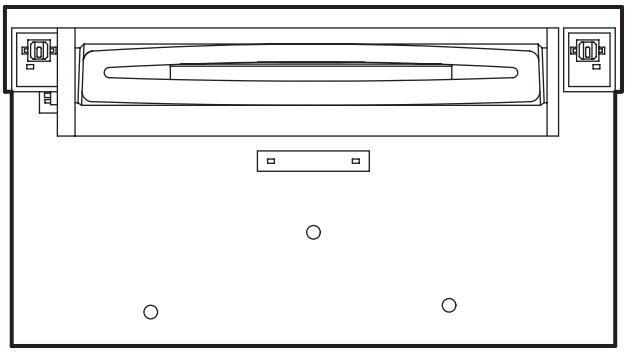
Service Manual



NISSAN Automobile Genuine
FM/AM Radio
With In-dash 6CD Changer
160W Stereo

Model PN-2714B-B
(Genuine No. 28185 EH10A)

ORIGINAL SERVICE MANUAL

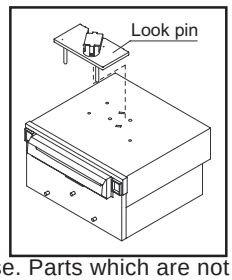
This additional service manual is designed to be used together with Model PN-2714B-A
This manual has described only the difference point with the original service manual.

Original model	Manual No.
PN-2714B-A	298-6224-00

DIFFERENCE FROM ORIGINAL MODEL

This unit supports the 16-figure display of Satellite radio.
IC402 Audio CPU different.
Parts that have been described to this manual have changed for the performance improvement.

NOTE



* In case that the main unit or the CD changer mechanism is transported for repair, the lock pin(966-0653-21) must be set to fix the mechanism assy.
* We cannot supply PWB with component parts in principle. When a circuit on PWB has failure, please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.
* This product includes technology owned by Microsoft Corporation and cannot be used or distributed without a license from MSLGP.
* Specifications and design are subject to change without notice for further improvement.

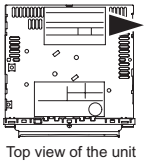
COMPONENTS

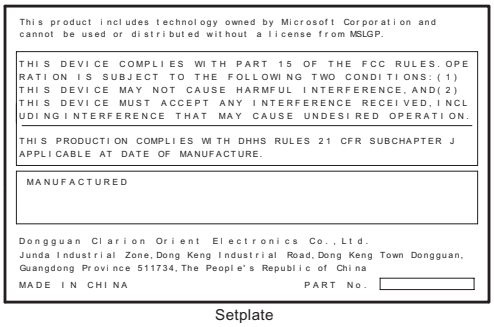
PN-2714B-B

1.	Main unit	----------	1
2.	Lock pin	966-0653-21	1

CAUTIONS

Use of controls,adjustment,or performance of procedures other than those specified herein,may result in hazardous radiation exposure.
The compact disc player should not be adjusted or repaired by anyone except properly qualified service personnel.


Top view of the unit


This product includes technology owned by Microsoft Corporation and cannot be used or distributed without a license from MSLGP.
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.
THIS PRODUCTION COMPLIES WITH DHHS RULES 21 CFR SUBCHAPTER J APPLICABLE AT DATE OF MANUFACTURE.
MANUFACTURED
Dongguan Clarion Orient Electronics Co., Ltd.
Junda Industrial Zone, Dong Keng Industrial Road, Dong Keng Town Dongguan, Guangdong Province 511734, The People's Republic of China
MADE IN CHINA
PART No.
Setplate

EXPLANATION OF IC

052-3188-83 M30853FHGP Audio CPU

Terminal Description

pin 1: CTRST : O : Contrast adjustment analogue output(DA).
pin 2: SPEED : IN: Speed Pulse input.
pin 3: EEP/ST DA :I/O: The serial data input/output for EEP and Sub-tuner.
pin 4: EEP/ST CK : O : The serial clock output for EEP and Sub-tuner.
pin 5: BU DET : IN: Backup detection signal input.
pin 6: GND : - : Ground.
pin 7: CN VSS : IN: Connect to VSS.
pin 8: ILL ON : IN: Illumination ON signal input.
pin 9: SYS ON : O : System ON signal output.
pin 10: RESET : IN: Reset signal input.
pin 11: X out : O : Crystal connection.
pin 12: VSS : - : Negative voltage supply.
pin 13: X IN : IN: Crystal connection.
pin 14: VDD : - : Positive voltage supply.
pin 15: NMI : IN: Connect to VDD.
pin 16: ACC IN : IN: ACC ON flag input.
pin 17: NC : O : Not in use.
pin 18: NC : O : Not in use.
pin 19: TB : IN: Time base input.
pin 20: NC : O : Not in use.
pin 21: M CAN RX : IN: M-CAN serial data input.
pin 22: M CAN TX : O : M-CAN serial data output.
pin 23: Power IC Stndb : O : The standby signal output to Power IC.
pin 24: BEEP/BUZ : O : BEEP out or the buz control.
pin 25: AMP ON : O : AMP ON signal output.
pin 26: DIMMER : O : PWM output.
pin 27: EEP/MT CK : O : The clock pulse output to EEP/Main-tuner.
pin 28: EEP/MT DA : O : The serial data output to EEP/Main-tuner.
pin 29: NDS TX : O : The serial data output for NDS.
pin 30: NDS RX : IN: The serial data input for NDS.
pin 31: NDS REQ 1 : IN: NDS request signal input.
pin 32: NDS CONT : O : NDS/Automatic-changer select.
pin 33: 1&6-CD TX : O : The serial data output for 1-CD & 6-CD-Changer.
pin 34: 6-CD RX / CK :I/O: The serial data input for 6-CD-Changer. Or clock pulse output for 1-CD.
pin 35: NDS REQ 2 : IN: NDS request signal input.
pin 36: NDS S-CHG : O : N-BUS audio signal select command output.
pin 37: NC : O : Not in use.
pin 38: NC : O : Not in use.
pin 39: WRITE ONLY : - : WRITE ONLY.
pin 40: NC : O : Not in use.
pin 41: NC : O : Not in use.
pin 42: NC : O : Not in use.
pin 43: 1-CD RX : IN: The serial data input from 1-CD.
pin 44: 1&6-CD REQ : IN: The request signal input from 1-CD & 6-CD-Changer.
pin 45: 1-CD CS : O : The chip select signal output.
pin 46: 1-CD WUP : O : The wakeup signal output.
pin 47: 1-CD RESET : O : The reset signal output.
pin 48: CD ON : O : CD ON signal output.
pin 49: Power IC Diag : IN: Power IC Diagnosis signal input.
pin 50: LCD ON : O : LCD ON signal output.
pin 51: KEY/LCD DO : O : Serial data output for KEY IC or LCD IC.
pin 52: KEY/LCD CLK : O : Clock output for KEY IC or LCD IC.
pin 53: KEY/LCD DI : IN: Serial data input for KEY IC or LCD IC.
pin 54: KEY/LCD CE : O : Chip Enable output for KEY IC or LCD IC.
pin 55: KEY/LCD S/R : O : KEY IC Standby output / LCD IC Reset output.
pin 56: VOL-2 : IN: The volume pulse input.
pin 57: VOL-1 : IN: The volume pulse input.
pin 58: NC : O : Not in use.
pin 59: NC : O : Not in use.
pin 60: VDD : - : Positive voltage supply.
pin 61: POWER-ON : - : POWER-KEY.
pin 62: GND : - : Ground
pin 63: RTLY-VOL2/TH : IN: Rotary volume pulse input / temperature.
pin 64: RTLY-VOL1 : IN: Rotary volume pulse input.
pin 65: MD WP : O : MD wakeup, H = WAKE-UP, L = SLEEP.
pin 66: MD XCS : O : MD chip select , H = CS ON.
pin 67: MD XSCK : O : MD clock.
pin 68: CPU-MD : O : The serial data output to MD.
pin 69: MD RESET : O : L = RESET ON.
pin 70: MD XSRQ : IN: MD request.
pin 71: NC : O : Not in use.
pin 72: MD DI : IN: The serial data input from MD.
pin 73: MD LD/RDS CK : IN: MD loading start signal input, DISC loading beginning of L. And RDS clock input.
pin 74: MD ON/RDS DI : O : MD power supply control, H = Power ON.
pin 75: NC : O : Not in use. And RDS data input.
pin 76: ST/SD/TWEET :I/O: At AM station receiving, this port outputs "L" by AM 900kHz receiving. At FM station receiving, this port detects the stereo signal. And at seeking or scanning, this port detects the SD signal.
pin 77: DSP INT : IN: The interrupt command input from the DSP IC.
pin 78: DSP RESET : O : Reset signal output to the DSP IC.
pin 79: S METER : IN: The input terminal of internal A/D converter to monitor the radio field strength.
pin 80: PLL DI : IN: Serial data input from the PLL IC.
pin 81: VFM PLL CE : O : The chip enable signal output to the PLL IC.
pin 82: VFM PLL DO : O : Serial data output to the PLL IC.
pin 83: VFM PLL CK : O : The clock pulse output to the PLL.
pin 84: VFM PLL DI : IN: Serial data input from the PLL IC.
pin 85: VFM SD : IN: Station detection signal input.
pin 86: VFM S METER : IN: The input terminal of internal A/D converter to monitor the radio field strength.
pin 87: MD EJ/6-CD LD : IN: MD eject signal input. And 6-CD-Changer loading start signal input.
pin 88: CD EJECT : IN: CD eject signal input.
pin 89: PLL CK : IN: PLL clock input.
pin 90: PLL DO : O : Serial data output to the PLL IC.
pin 91: PLL CE : O : The chip enable signal output to the PLL IC.
pin 92: N REMO B : IN: The input terminal of internal ADC for N-remote-controller signal.
pin 93: N REMO A : IN: The input terminal of internal ADC for N-remote-controller signal.
pin 94: A GND : - : Analog ground.
pin 95: NC : O : Not in use.
pin 96: Vref : - : Reference voltage.
pin 97: A VCC : - : Positive voltage supply for the internal analog section.
pin 98: DSP/PIC/RDS C: IN: The clock pulse input.
pin 99: DSP/PIC/RDS D: IN: The serial data input.
pin 100: ANT ON : O : Antenna ON command output.

DEFFARENCE FROM ORIGINAL EXPLODED VIEW/PARTS LIST

Main section

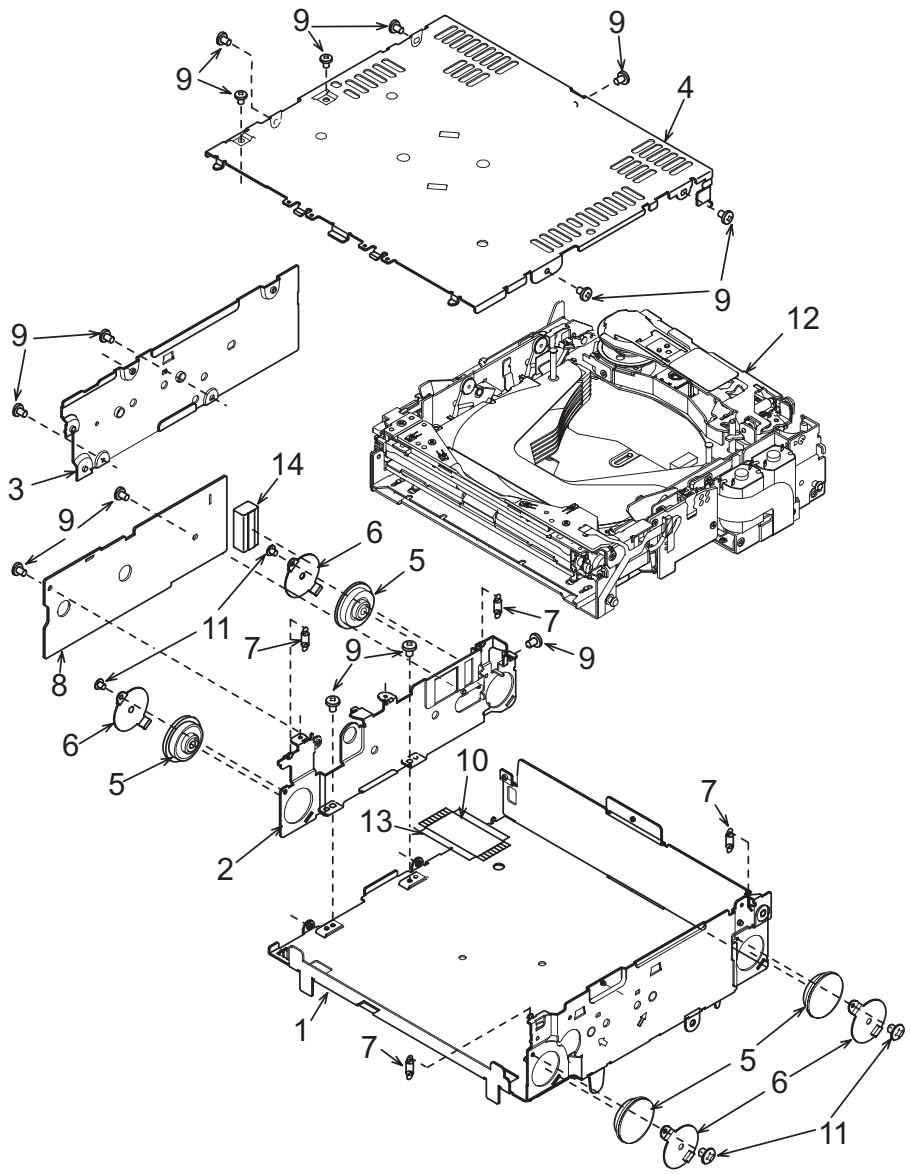
*Refer to the figure on page 9 of original manual.The following parts were changed.

NO.	PART NO.	DESCRIPTION	Q'TY
16	880-1921V	TUNER PACK	1
31	929-0731-81	CD CHANGER MODULE	1

NO.	PART NO.	DESCRIPTION	Q'TY
37	347-7359-01	EARTH SHEET	1
38	286-6469-14	SETPLATE	1

EXPLODED VIEW/PARTS LIST

CD changer module section



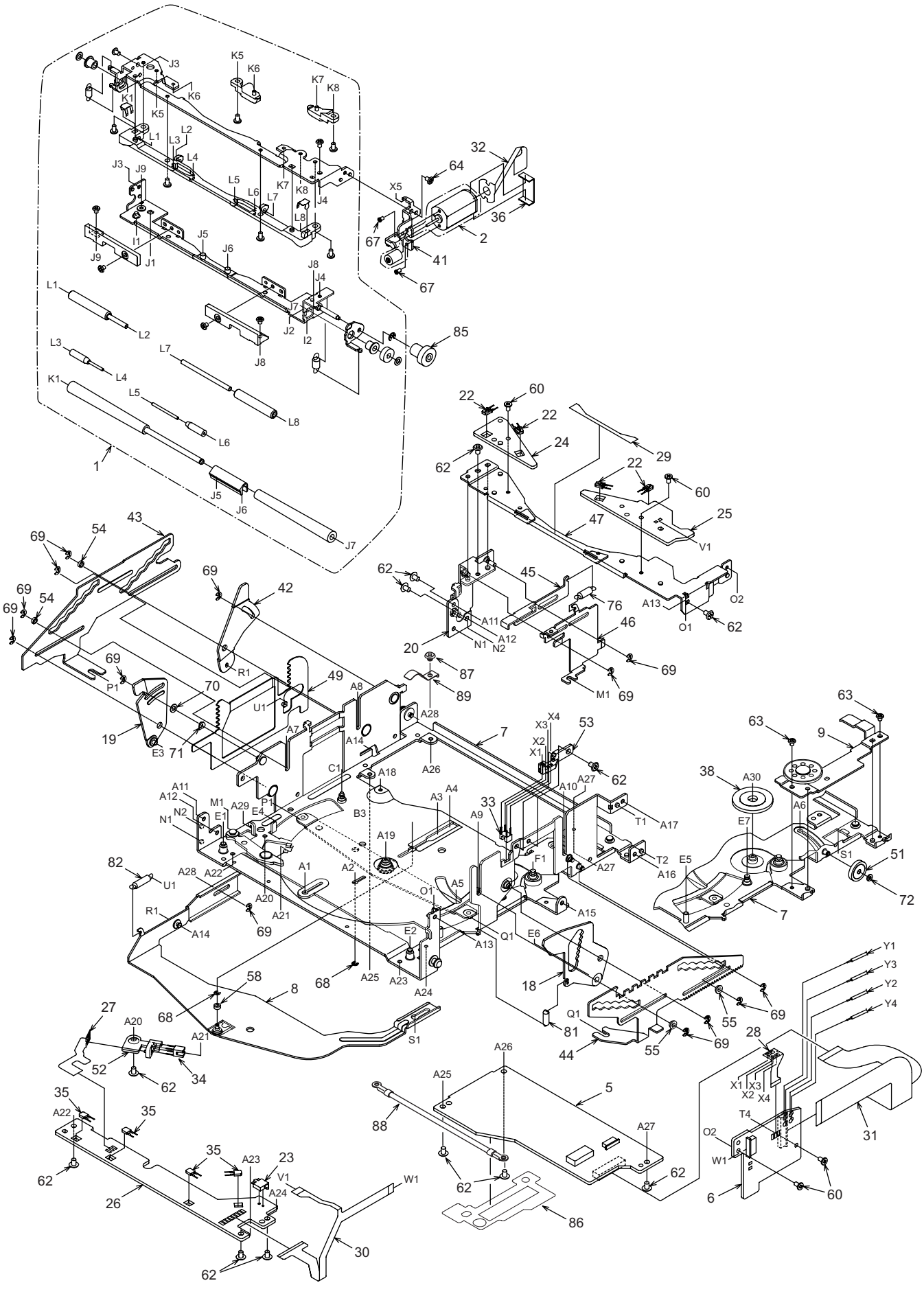
NO.	PART NO.	DESCRIPTION	Q'TY
1	311-1864-24	LOWER CASE	1
2	331-3896-22	PWB-HOLDER	1
3	305-0334-20	SIDE CASE	1
4	310-1741-28	UPPER CASE	1
5	629-0083-01	DAMPER	4
6	620-1086-20	DAMPER-H-PLT	4
7	750-3491-00	FL-SPRING	4

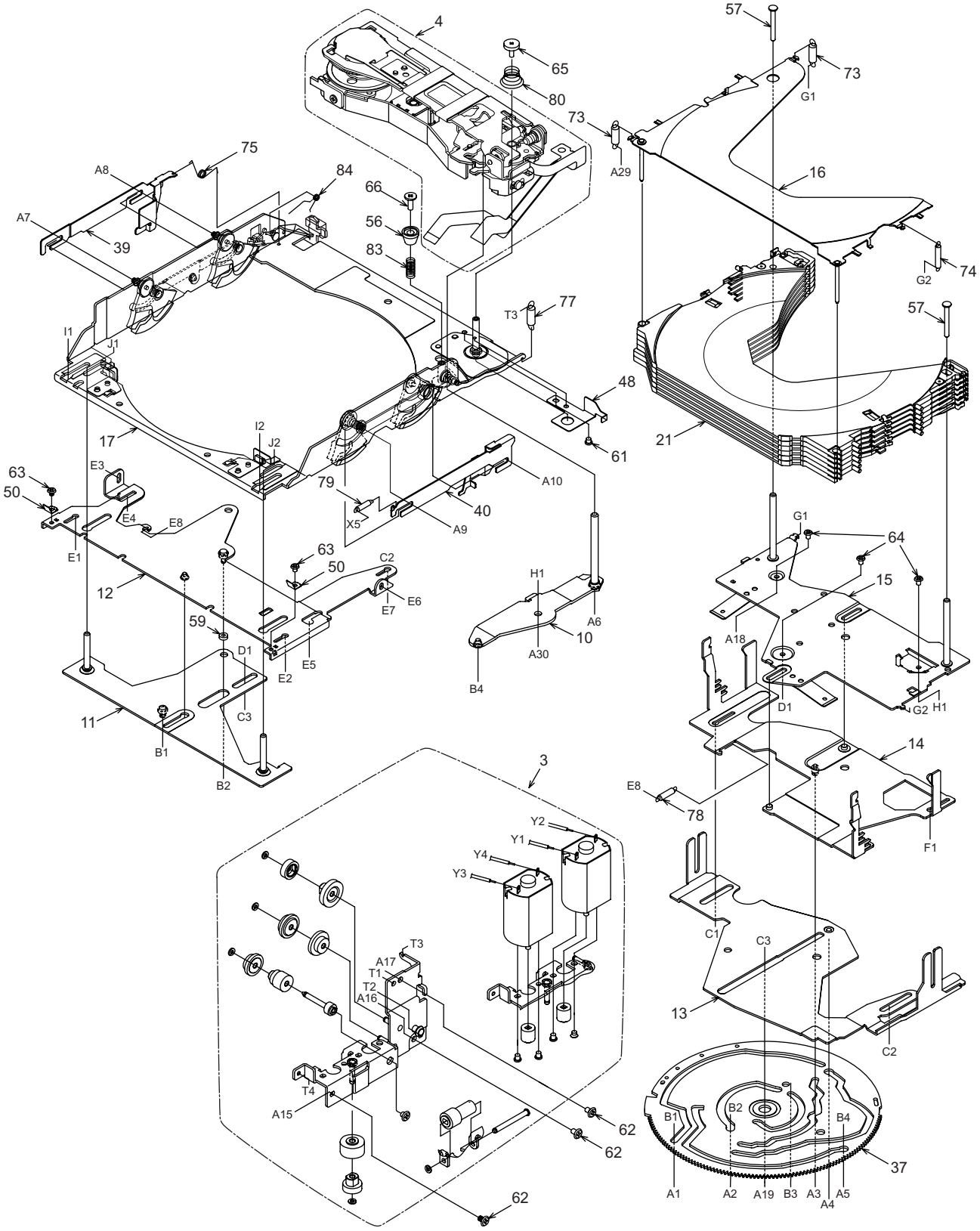
NO.	PART NO.	DESCRIPTION	Q'TY
8	----------	CD PWB	1
9	716-1716-02	SCREW(M2x3)	14
10	HBS-561-100	FPC	1
11	716-3450-00	SCREW(M1.7x2)	4
12	----------	CD CHANGER MECHANISM	1
13	347-6619-00	INSULATOR	1
14	345-8748-00	GASKET	1

* No.12 : Refer to CD changer mechanism section.(page 4 - 6)

CD changer mechanism section

*Please see the parts list on page 6.




4
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80
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A8
84
A7
39
66
56
83
77
T3
I1
J1
48
17
I2
J2
61
63
50
E3
E4
E8
E1
79
X5
A9
40
A10
12
63
50
C2
E7
E6
59
D1
E2
E5
H1
A6
A30
10
B4
11
B1
C3
B2
3
Y2
Y1
Y4
Y3
T3
A17
T1
T2
A16
T4
A15
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G1
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A29
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G2
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G1
64
15
A18
D1
G2
H1
14
E8
78
F1
C1
C3
13
C2
B1
B2
B4
37
A1
A2
A19
B3
A3
A4
A5

PN-2714B-B

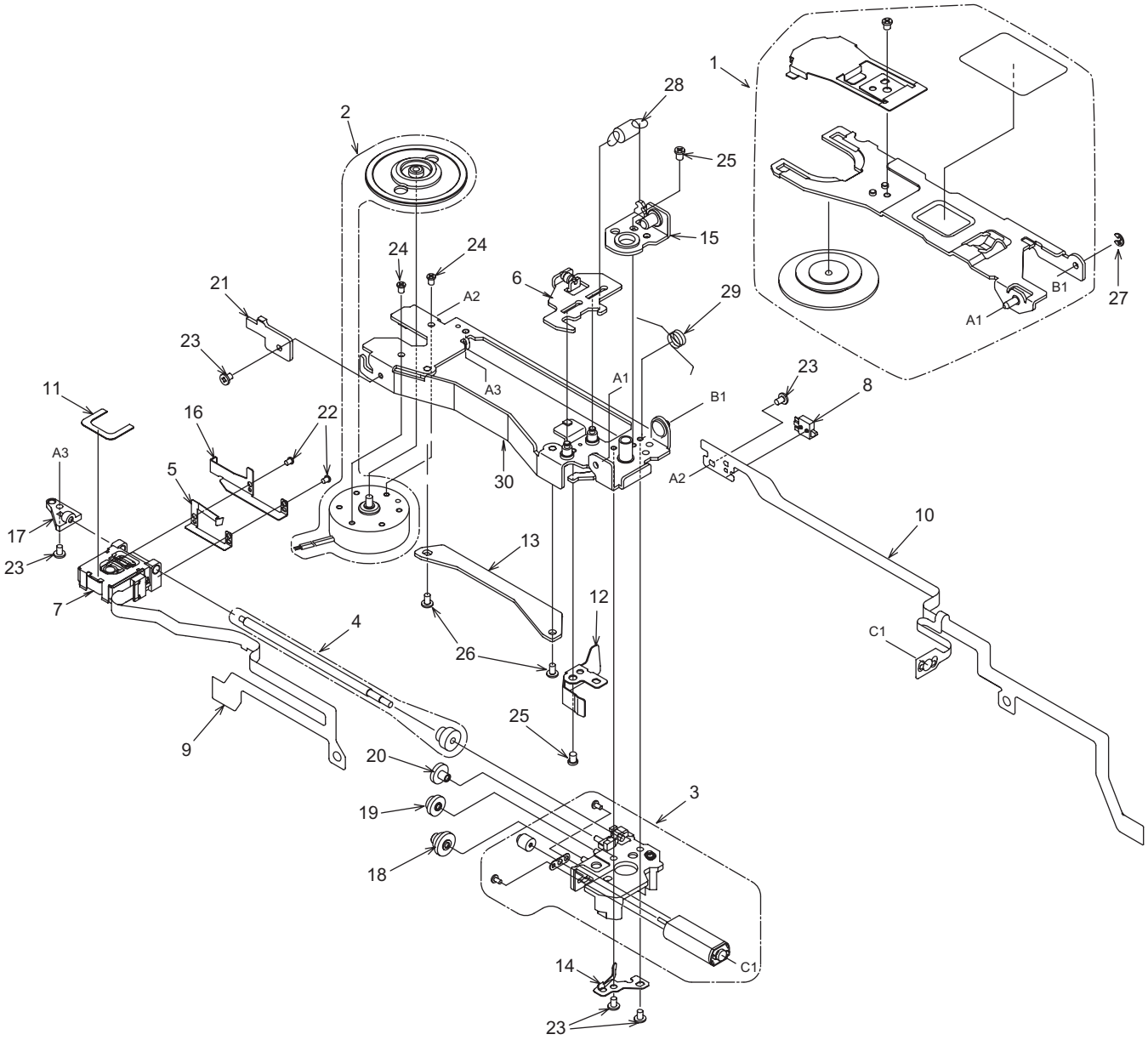
CD changer mechanism section

NO.	PART NO.	DESCRIPTION	Q'TY
1	HBS-562-100	LOADING UNIT (WITHOUT MOTOR)	1
2	SMA-186-100	LOADING MOTOR ASSY	1
3	HBS-530-100	MOTOR PLATE SUB ASSY	1
4	HBS-531-104	DRIVE UNIT	1
5	----------	DSP PWB	1
6	----------	DRIVER PWB	1
7	966-1751-22	CHASSIS ASSY	1
8	966-0600-23	LOCK-P-RE-ASSY	1
9	966-0601-21	M-GEAR-P-ASSY	1
10	966-0602-26	DR-LINK-ASSY	1
11	966-0603-21	MODE-P-ASSY	1
12	966-0604-26	LOCK-PF-ASSY	1
13	966-0605-20	SHIFT-P-ASSY	1
14	966-0606-23	HLC-PLATE-ASSY	1
15	966-1788-22	COV-PLATE-ASSY	1
16	HBS-535-100	TOP-PLATE-ASSY	1
17	966-0652-24	DR-BASE-P-ASSY	1
18	966-0615-21	LOCK-L-RF-ASSY	1
19	966-0616-20	LOCK-L-LF-ASSY	1
20	966-0618-21	EJECT-B-ASSY	1
21	966-1742-20	DISC-HOL-ASSY	1
22	001-7042-00	DIODE (GL4800)	4
23	013-7414-50	DETECTOR SWITCH	1
24	----------	LED-L-PWB	1
25	----------	LED-R-PWB	1
26	----------	SENSOR PWB	1
27	039-2009-00	PIM-FPC (WITHOUT COMPONENT)	1
28	039-2010-00	PIV-FPC (WITHOUT COMPONENT)	1
29	039-2011-01	LED-FPC	1
30	039-2012-00	SENSOR-FPC	1
31	039-2013-04	MOS-FPC	1
32	039-2014-01	L-MOTOR-FPC (WITHOUT COMPONENT)	1
33	051-5806-01	IC (GPIS93)	1
34	051-5806-02	IC (GPIS95)	1
35	060-0252-01	PHOTO-TR	4
36	347-6657-01	LO-COVER SHEET	1
37	620-1041-26	GEAR PLATE	1
38	620-1042-20	M-GEAR-H	1
39	620-1056-22	HLR-PLATE-L	1
40	620-1580-20	HLR-PLATE-R	1
41	620-1576-20	LO-MOTOR-PLT	1
42	620-1066-20	LOCK LINK-LR	1
43	620-1067-21	SLIDE PLATE-L	1
44	620-1068-22	SLIDE PLATE-R	1

NO.	PART NO.	DESCRIPTION	Q'TY
45	620-1071-21	EJECT ARM	1
46	620-1072-20	EJECT PLATE	1
47	620-1577-20	FRONT PLATE	1
48	620-1083-20	FPC-PLATE	1
49	620-1090-20	GAP PLATE	1
50	620-1568-21	RATTLE PLATE-F	2
51	621-0640-20	V-GEAR-G	1
52	621-0641-21	PI-HOLDER-M	1
53	621-0656-21	PI-HOLDER-V	1
54	622-1622-20	SL-G-ROLLER	2
55	622-1623-00	SL-G-ROLLER-R	2
56	622-1648-23	DU-STP-SLEEVE	1
57	622-1650-23	COV-PLATE PIN-B	2
58	622-1651-00	LOCK-RE-ROLLER	1
59	622-1652-00	LOCK-PF-ROLLER	1
60	716-1866-50	SCREW(M1.7x3)	4
61	716-1873-00	SCREW(M2x1.6)	1
62	716-3449-00	SCREW(M2x3)	15
63	716-3450-00	SCREW(M1.7x2)	4
64	716-3451-01	SCREW(M1.7x2.5)	4
65	716-3459-01	SCREW(M1.7x5)	1
66	716-3466-53	SCREW(M2x6)	1
67	738-1422-1B	PRECISION SCREW	2
68	743-1200-10	E-RING	2
69	743-1500-10	E-RING	13
70	746-0624-00	WASHER	1
71	746-0712-23	WASHER	1
72	746-0761-00	WASHER	1
73	750-3478-01	TOP-P-SP-L	2
74	750-3479-01	TOP-P-SP-R	1
75	750-3480-01	DR-LOCK-SP	1
76	750-3483-00	EJECT-A-SPRING	1
77	750-3484-01	DR-BASE-SPRING	1
78	750-3485-01	TENSION-SP-L	1
79	750-3486-01	LO-TENSION-SP	1
80	750-3489-01	DRIVE-P-SPRING	1
81	750-3496-00	GAP-P-SPRING R	1
82	750-3497-00	GAP-P-SPRING L	1
83	750-6711-01	DU-STP-SPRING	1
84	750-6712-01	DR-LOCK-SP-B	1
85	621-0651-22	LOAD GEAR-A	1
86	347-7860-20	FPC COVER	1
87	716-1850-01	SCREW	1
88	854-4348-01	EXTENSION LEAD	1
89	620-1604-20	DR-PLATE-SCREW	1

*No.4 : Refer to the next Page.

Drive unit section : Drive unit : HBS-531-104



NO.	PART NO.	DESCRIPTION	Q'TY
1	HBS-532-101	CLAMPER SUB ASSY	1
2	SMA-193-101	SPINDLE MOTOR ASSY	1
3	SMA-191-100	SLED MOTOR ASSY	1
4	HBS-515-103	LS-ASSY	1
5	620-1587-83	SH-SP-PLT	1
6	HBS-542-101	D-SHIFT-P-ASSY	1
7	969-0011-01	PICK UP-ASSY	1
8	013-7414-50	DETECT SWITCH	1
9	039-2015-02	P/U-FPC	1
10	039-2016-02	M/S-FPC (WITHOUT COMPONENT)	1
11	347-6632-00	PU-SHEET	1
12	620-1078-21	PUSH PLATE	1
13	620-1080-22	PU-GUIDE PLATE	1
14	620-1081-20	SCREW PUSH-PLT	1
15	966-0650-20	SPRING PLT ASSY	1

NO.	PART NO.	DESCRIPTION	Q'TY
16	620-1730-81	SCREW-HOL-PLT	1
17	621-0670-20	LS-HOLDER-L	1
18	621-0673-20	D-GEAR A	1
19	621-0674-20	D-GEAR B	1
20	621-0675-20	D-GEAR C	1
21	621-0683-21	DU-STOPPER	1
22	716-3511-01	SCREW(M1.4x3)	2
23	716-3470-01	SCREW(M1.7x3)	5
24	738-1720-1H	PRECISION SCREW(M1.7x2)	2
25	738-2025-1H	PRECISION SCREW(M2x2.5)	2
26	716-3474-01	SCREW(M1.7x3)	2
27	743-1500-20	E-RING	1
28	750-3487-00	SHIFT-P-SPRING	1
29	750-3504-00	CLAMP-A-SPRING	1
30	966-0649-02	DRIVE PLT-ASSY	1

DIFFERENCE FROM ORIGINAL ELECTRICAL PARTS LIST

Main PWB section(B1)

*Refer to the parts list on page 14 and 15 of original manual.The following parts were changed.

REF No.	PART No.	DESCRIPTION
BL152	880-1921V	TUNER PACK
IC402	052-3188-83	M30853FHGP

Note)Several different parts of the same reference number are alternative parts.
One of those parts is used in the set.

REF No.	PART No.	DESCRIPTION
D204	001-0529-32	MA8056-M
	001-4301-32	HZU 5.6B2
	001-4305-20	UDZSTE-17 5.6B
D470	001-0516-90	MA111
	001-0517-90	1SS355
D503	001-0516-90	MA111
	001-0517-90	1SS355
D504	001-0516-90	MA111
	001-0517-90	1SS355
D505	001-0529-48	MA8091-H
	001-4301-48	HZU 9.1B3
D506	001-0516-90	MA111
	001-0517-90	1SS355
D507	001-0516-90	MA111
	001-0517-90	1SS355
D511	001-0516-90	MA111
	001-0517-90	1SS355

REF No.	PART No.	DESCRIPTION
D512	001-0529-34	MA8062-L
	001-4301-34	HZU 6.2B1
Q101	125-2026-91	UN5211
	125-2027-91	DTC114EUA-T106
Q140	192-4116-00	2SC4116
	192-4081-00	2SC4081-T106-Q,R,S
Q152	192-4116-00	2SC4116
	192-4081-00	2SC4081-T106-Q,R,S
Q153	192-4116-00	2SC4116
	192-4081-00	2SC4081-T106-Q,R,S
Q155	125-2026-91	UN5211
	125-2027-91	DTC114EUA-T106
Q156	125-2026-91	UN5211
	125-2027-91	DTC114EUA-T106

REF No.	PART No.	DESCRIPTION
Q160	125-2026-91	UN5211
	125-2027-91	DTC114EUA-T106
Q204	125-2026-91	UN5211
	125-2027-91	DTC114EUA-T106
Q302	125-2026-91	UN5211
	125-2027-91	DTC114EUA-T106
Q308	125-2026-91	UN5211
	125-2027-91	DTC114EUA-T106
Q508	125-2026-95	UN521N
	125-2027-95	DTC143ZUA-T106
Q512	125-2026-91	UN5211
	125-2027-91	DTC114EUA-T106
Q513	190-1298-00	2SA1298
	191-1197-50	2SB1197K
Q517	192-4116-00	2SC4116
	192-4081-00	2SC4081-T106-Q,R,S

Sub PWB section(B2)

*Refer to the figure on page 16 of original manual.

Note)Several different parts of the same reference number are alternative parts.
One of those parts is used in the set.

REF No.	PART No.	DESCRIPTION
D820	001-0529-44	MA8082-M
	001-4301-44	HZU 8.2B2
D824	001-0516-90	MA111
	001-0517-90	1SS355
D825	001-0516-90	MA111
	001-0517-90	1SS355
D826	001-0516-90	MA111
	001-0517-90	1SS355

REF No.	PART No.	DESCRIPTION
Q820	192-4116-00	2SC4116
	192-4081-00	2SC4081-T106-Q,R,S
Q823	192-4116-00	2SC4116
	192-4081-00	2SC4081-T106-Q,R,S
Q824	192-4116-00	2SC4116
	192-4081-00	2SC4081-T106-Q,R,S

REF No.	PART No.	DESCRIPTION
Q825	192-4116-00	2SC4116
	192-4081-00	2SC4081-T106-Q,R,S
Q826	125-0020-91	UN5111
	125-0025-92	RN2302
Q829	125-2026-91	UN5211
	125-2027-91	DTC114EU

ES PWB section(B3)

*Refer to the figure on page 17 of original manual.The following parts were changed.

REF No.	PART No.	DESCRIPTION
J801	074-3010-60	10P SOCKET

ELECTRICAL PARTS LIST(CD changer mechanism)

CD PWB section(B4)

REF No.	PART No.	DESCRIPTION
C1	168-4735-56	0.047uF Z
C2	168-4735-56	0.047uF Z
C4	168-1222-55	1200pF K
C5	163-2263-35	16V22uF
C6	168-1222-55	1200pF K
C12	168-1222-55	1200pF K
C15	168-1222-55	1200pF K
C16	163-2263-35	16V22uF
C18	168-1045-56	0.1uF Z
C19	166-1011-50	100pF CH
C21	168-1032-55	0.01uF K
C22	168-1045-56	0.1uF Z
C23	168-1045-56	0.1uF Z
C24	168-1032-55	0.01uF K
C25	163-1073-15	6.3V100uF
C26	178-1052-78	1uF
C27	168-1045-56	0.1uF Z

REF No.	PART No.	DESCRIPTION
C28	042-0671-01	10V 47uF TA
C29	168-1045-56	0.1uF Z
C30	178-3342-78	0.33uF
C31	042-1673-00	10V 220uF
CCT4	050-0140-55	1/32W 2.2k ohmx4J
CCT5	050-0145-54	1/16W 47k ohm x4
CCT6	050-0145-53	1/16W 220k ohm x4 J
D2	001-2610-90	RB480KTL
IC2	051-5445-08	BD5227G-TR
IC3	052-5061-02	M30621MCM-FW6GP
IC4	051-9402-78	BR93L56RFVM-W
IC5	051-3332-90	NJU7222U33
IC6	051-3293-90	BA033SFP-E2
J1	074-1189-95	45P
J3	074-1237-70	20P

REF No.	PART No.	DESCRIPTION
P1	076-0478-55	PLUG
Q3	190-1162-00	2SA1162
Q4	198-3018-00	2SK3018
Q5	131-1188-50	2SB1188PQR
Q6	198-3018-00	2SK3018
Q7	125-2004-92	RN1402
	125-2020-92	RN1402TE85L
Q8	125-2004-92	RN1402
	125-2020-92	RN1402TE85L
Q9	125-0014-92	DTA114EK
	125-0002-92	RN2402TE85L
Q53	193-0601-00	2SD601A
R2	119-2211-15	1/10W 220 ohm
R4	119-4731-15	1/10W 47k ohm
R8	119-4731-15	1/10W 47k ohm
R10	119-2211-15	1/10W 220 ohm
R13	119-1041-15	1/10W 100k ohm

REF No.	PART No.	DESCRIPTION
R14	119-2221-15	1/10W 2.2k ohm
R15	119-1041-15	1/10W 100k ohm
R16	119-1021-15	1/10W 1k ohm
R20	119-4731-15	1/10W 47k ohm
R24	119-4731-15	1/10W 47k ohm
R25	119-1031-15	1/10W 10k ohm
R26	119-4721-15	1/10W 4.7k ohm
R27	119-1031-15	1/10W 10k ohm
R28	119-1041-15	1/10W 100k ohm
R29	119-1041-15	1/10W 100k ohm

REF No.	PART No.	DESCRIPTION
R31	119-4731-15	1/10W 47k ohm
R32	119-0000-05	1/10W 0 ohm JW
R35	119-0000-05	1/10W 0 ohm JW
R36	119-4731-15	1/10W 47k ohm
R37	119-4731-15	1/10W 47k ohm
R38	119-2231-15	1/10W 22k ohm
R39	119-2231-15	1/10W 22k ohm
R40	119-2231-15	1/10W 22k ohm
R41	119-4711-15	1/10W 470 ohm
R42	119-2231-15	1/10W 22k ohm

REF No.	PART No.	DESCRIPTION
R43	119-2241-15	1/10W 220k ohm
R60	119-0000-05	1/10W 0 ohm JW
R530	119-4731-15	1/10W 47k ohm
R550	119-4731-15	1/10W 47k ohm
TM1	073-0768-90	TERMINAL
TM2	073-0766-90	TERMINAL
TM4	073-0766-90	TERMINAL
TM5	073-0766-90	TERMINAL
X1	060-1533-90	CSTCE10M0G52-R0
PWB	039-2532-20	PWB(WITHOUT COMPONENT)

DSP PWB section(B5)

REF No.	PART No.	DESCRIPTION
C1	042-0671-01	10V 47uF TA
C2	168-4735-56	0.047uF Z
C3	046-4722-58	4700pF
C4	046-1032-78	0.01uF
C5	168-1045-56	0.1uF Z
C6	042-0671-01	10V 47uF TA
C7	168-1045-56	0.1uF Z
C8	168-1045-56	0.1uF Z
C9	045-1007-50	10pF
C10	168-1045-56	0.1uF Z
C11	045-1007-50	10pF
C12	168-1045-56	0.1uF Z
C13	042-0672-00	25V 47uF TA
C14	168-4735-56	0.047uF Z
C15	168-4735-56	0.047uF Z
C16	168-4735-56	0.047uF Z
C17	178-1052-78	1uF
C18	045-4701-50	47pF
C19	168-1045-56	0.1uF Z
C20	046-4712-58	470pF
C21	046-4712-58	470pF
C22	168-1045-56	0.1uF Z
C23	046-1532-78	0.015uF
C24	168-1045-56	0.1uF Z
C25	046-6822-58	6800pF
C26	046-1032-78	0.01uF
C28	046-1022-58	1000pF
C29	046-3332-78	0.033uF
C32	046-4722-58	4700pF
C33	046-1522-58	1500pF
C34	168-1045-56	0.1uF Z
C35	046-1532-78	0.015uF
C36	168-1045-56	0.1uF Z
C37	168-1045-56	0.1uF Z
C38	042-0671-01	10V 47uF TA
C39	178-1052-78	1uF
C40	045-6801-50	68pF
C41	168-1045-56	0.1uF Z
C42	178-1052-78	1uF
C43	042-0671-01	10V 47uF TA
C44	046-6812-58	680pF
C45	168-1045-56	0.1uF Z
C46	168-1045-56	0.1uF Z
C47	042-0671-01	10V 47uF TA
C48	168-5632-78	16V 0.056uF
C49	168-1045-56	0.1uF Z
C50	168-1045-56	0.1uF Z
C51	168-1045-56	0.1uF Z
C53	168-1045-56	0.1uF Z
C54	042-0671-01	10V 47uF TA
C56	168-4712-55	470pF K
C57	046-1032-78	0.01uF
C58	168-4712-55	470pF K
C59	168-1045-56	0.1uF Z
C60	168-1045-56	0.1uF Z
C61	046-1032-78	0.01uF
C62	042-0671-01	10V 47uF TA
C63	046-1032-78	0.01uF

REF No.	PART No.	DESCRIPTION
C64	168-1045-56	0.1uF Z
C65	045-1201-50	12pF
C66	046-1032-78	0.01uF
C67	046-1032-78	0.01uF
C68	168-1045-56	0.1uF Z
C69	045-1201-50	12pF
C101	046-1032-78	0.01uF
C102	046-1032-78	0.01uF
CCT1	050-0140-68	1/32W 3.3k ohm x4J
CCT4	050-0140-63	1/32W 47k ohm x4J
D1	001-0367-91	1SS226
D2	001-2610-90	RB480KTL
IC2	051-6399-00	TC94A15F
IC3	051-6060-08	BD7961FM-E2
IC4	051-7518-18	SN74LVC139APWR
IC5	052-5062-04	MBM29DL800BA-90PFTN
IC6	051-7518-18	SN74LVC139APWR
IC7	051-9330-00	K4S641632F-TC60
IC8	051-7203-48	SN74LV74APW
IC9	051-6700-00	TMS320DA140 PGE160
IC10	051-3315-90	TPS76316DBVR
IC11	051-7221-58	SN74AHC1G04 HDCKR
IC12	051-7525-08	SN74LVC2GU04 DCKR
IC13	051-7526-08	SN74LVC1G126 DCKR
J1	074-1201-65	15P
J2	074-1138-56	6P
J3	074-1059-76	26P
J4	074-1189-95	45P
J5	074-1201-60	10P
L2	010-3104-54	600ohm / 100MHz
L3	010-3104-54	600ohm / 100MHz
Q1	131-1188-50	2SB1188PQR
Q2	131-1188-50	2SB1188PQR
Q3	125-2004-92	RN1402
	125-2020-92	RN1402TE85L
R1	033-1021-15	1/10W 1k ohm
R2	033-1021-15	1/10W 1k ohm
R3	033-3311-15	1/10W 330 ohm
R4	033-2211-15	1/10W 220 ohm
R5	033-2211-15	1/10W 220 ohm
R6	033-1021-15	1/10W 1k ohm
R7	033-1051-15	1/10W 1M ohm
R8	033-0000-05	1/10W 0 ohm
R10	033-5621-15	1/10W 5.6k ohm
R11	033-4731-15	1/10W 47k ohm
R12	119-3341-15	1/10W 330k ohm
R13	033-2231-15	1/10W 22k ohm
R14	033-2231-15	1/10W 22k ohm
R15	117-1001-15	1/8W 10 ohm
R16	033-5631-15	1/10W 56k ohm
R17	033-3331-15	1/10W 33k ohm
R18	033-6831-15	1/10W 68k ohm
R19	033-6831-15	1/10W 68k ohm

REF No.	PART No.	DESCRIPTION
R20	033-1011-15	1/10W 100 ohm
R21	116-4711-15	1/4W 470 ohm
R22	117-1811-15	1/8W 180 ohm
R23	116-4711-15	1/4W 470 ohm
R24	033-2231-15	1/10W 22k ohm
R25	033-2231-15	1/10W 22k ohm
R26	033-2231-15	1/10W 22k ohm
R27	033-1011-15	1/10W 100 ohm
R28	033-4731-15	1/10W 47k ohm
R29	033-2231-15	1/10W 22k ohm
R30	033-4721-15	1/10W 4.7k ohm
R31	033-4721-15	1/10W 4.7k ohm
R32	033-4731-15	1/10W 47k ohm
R33	033-4731-15	1/10W 47k ohm
R35	033-4731-15	1/10W 47k ohm
R36	033-3311-15	1/10W 330 ohm
R37	033-4731-15	1/10W 47k ohm
R38	033-3311-15	1/10W 330 ohm
R39	033-2211-15	1/10W 220 ohm
R40	033-1011-15	1/10W 100 ohm
R41	033-1001-15	1/10W 10 ohm
R42	033-1001-15	1/10W 10 ohm
R45	033-1011-15	1/10W 100 ohm
R46	033-4731-15	1/10W 47k ohm
R47	033-4731-15	1/10W 47k ohm
R48	033-1011-15	1/10W 100 ohm
R49	033-0000-05	1/10W 0 ohm
R50	033-0000-05	1/10W 0 ohm
R51	033-8231-15	1/10W 82k ohm
R52	033-0000-05	1/10W 0 ohm
R53	033-4731-15	1/10W 47k ohm
R63	033-2231-15	1/10W 22k ohm
R64	033-2231-15	1/10W 22k ohm
R65	033-4731-15	1/10W 47k ohm
R66	033-4731-15	1/10W 47k ohm
R100	033-1011-15	1/10W 100 ohm
R101	033-1011-15	1/10W 100 ohm
R102	033-1011-15	1/10W 100 ohm
R103	033-1011-15	1/10W 100 ohm
R104	033-1011-15	1/10W 100 ohm
R105	033-1011-15	1/10W 100 ohm
R106	033-1011-15	1/10W 100 ohm
R107	033-4731-15	1/10W 47k ohm
R200	033-1051-15	1/10W 1M ohm
R201	033-1021-15	1/10W 1k ohm
R202	033-1021-15	1/10W 1k ohm
R220	033-4731-15	1/10W 47k ohm
R301	119-2231-15	1/10W 22k ohm
R302	119-3911-15	1/10W 390 ohm
X1	061-3534-90	16.92MHz
PWB	039-2531-20	PWB(WITHOUT COMPONENT)

Sensor PWB sction(B6)

REF No.	PART No.	DESCRIPTION
PT3	060-0252-01	PT4850F
PT4	060-0252-01	PT4850F

REF No.	PART No.	DESCRIPTION
PT5	060-0252-01	PT4850F
PT6	060-0252-01	PT4850F

REF No.	PART No.	DESCRIPTION
S1	013-7414-50	SPVG22
PWB	039-1956-00	PWB(WITHOUT COMPONET)

PIM-FPC section(B7)

REF No.	PART No.	DESCRIPTION
IC5	051-5806-02	GPIS95

Driver PWB section(B8)

REF No.	PART No.	DESCRIPTION
C1	168-1045-56	0.1uF
C2	163-1073-35	16V100uF
D1	001-0529-29	MA8051-M
IC1	051-6044-18	BA6920FP-Y

REF No.	PART No.	DESCRIPTION
J1	074-1239-76	26P
J2	074-1100-59	9P
R1	033-1021-15	1/10W 1k ohm
R2	032-0104-59	1/4W 2.2 ohm

REF No.	PART No.	DESCRIPTION
R3	032-0104-59	1/4W 2.2 ohm
S1	013-7412-50	SPVG21
PWB	039-2242-00	PWB(WITHOUT COMPONET)

PIV-FPC section(B9)

REF No.	PART No.	DESCRIPTION
IC6	051-5806-01	GPIS93

LED-L-PWB section(B10)

REF No.	PART No.	DESCRIPTION
LED3	001-7042-00	GL4800
LED4	001-7042-00	GL4800

REF No.	PART No.	DESCRIPTION
PWB	039-1954-20	PWB(WITHOUT COMPONET)

LED-R-PWB section(B11)

REF No.	PART No.	DESCRIPTION
LED5	001-7042-00	GL4800
LED6	001-7042-00	GL4800

REF No.	PART No.	DESCRIPTION
PWB	039-1955-20	PWB(WITHOUT COMPONET)

L-Motor-FPC section(B12)

REF No.	PART No.	DESCRIPTION
M1	SMA-186-100	LOADING

M/S-FPC section(B13)

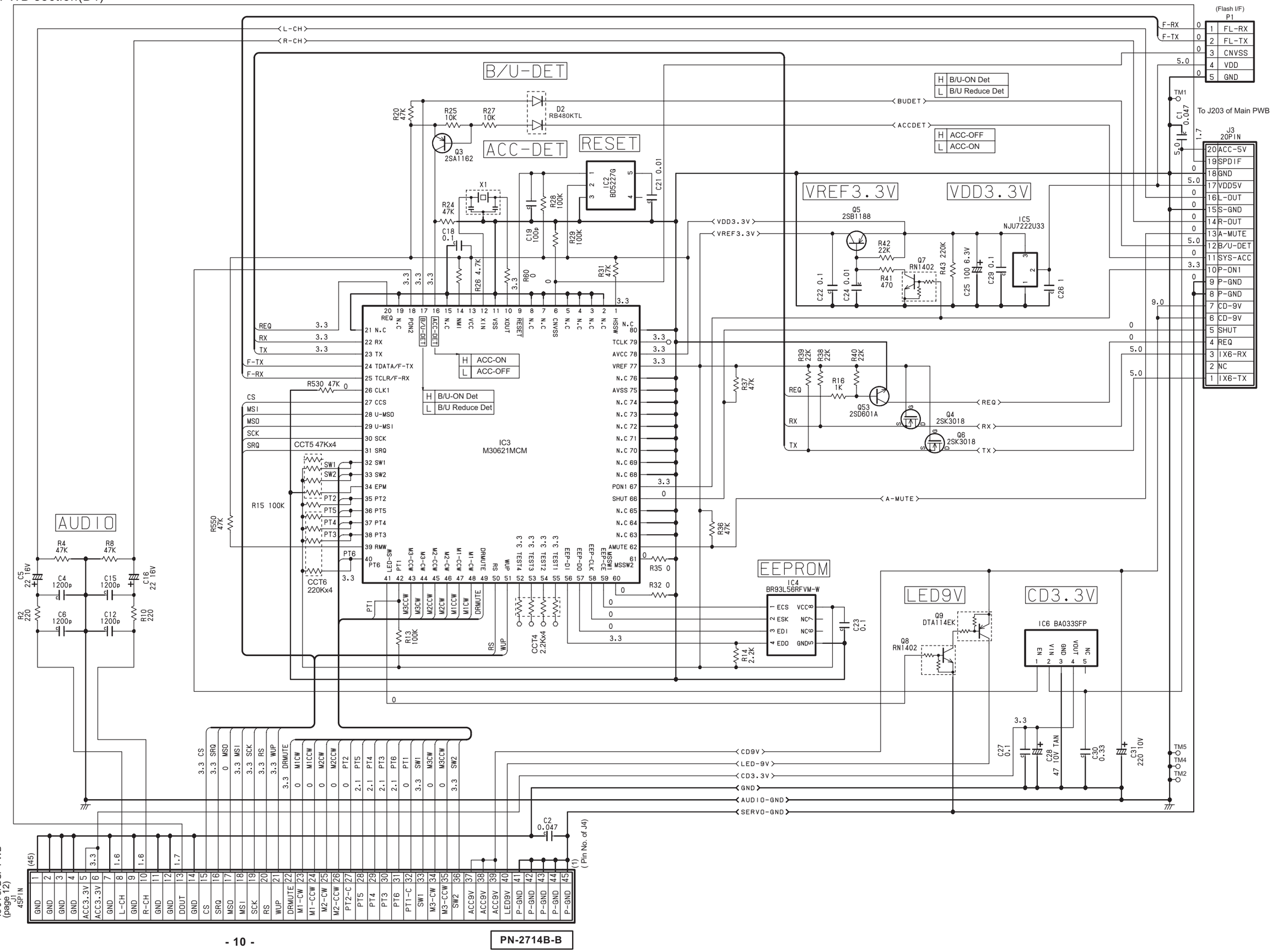
REF No.	PART No.	DESCRIPTION
M2	SMA-193-102	SPINDLE

REF No.	PART No.	DESCRIPTION
M3	SMA-191-100	SLED

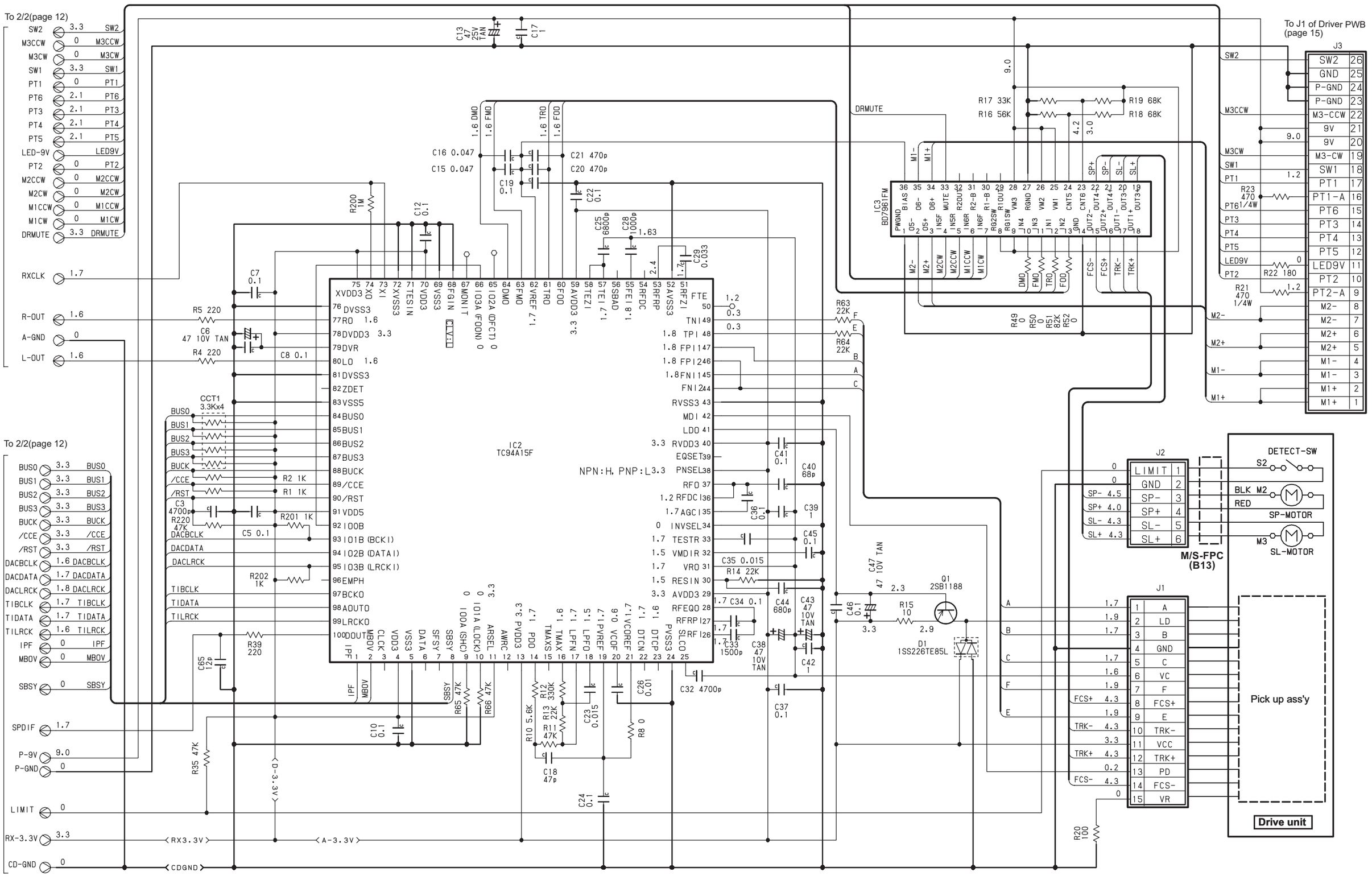
REF No.	PART No.	DESCRIPTION
S2	013-7414-50	SPVG22

CIRCUIT DIAGRAM

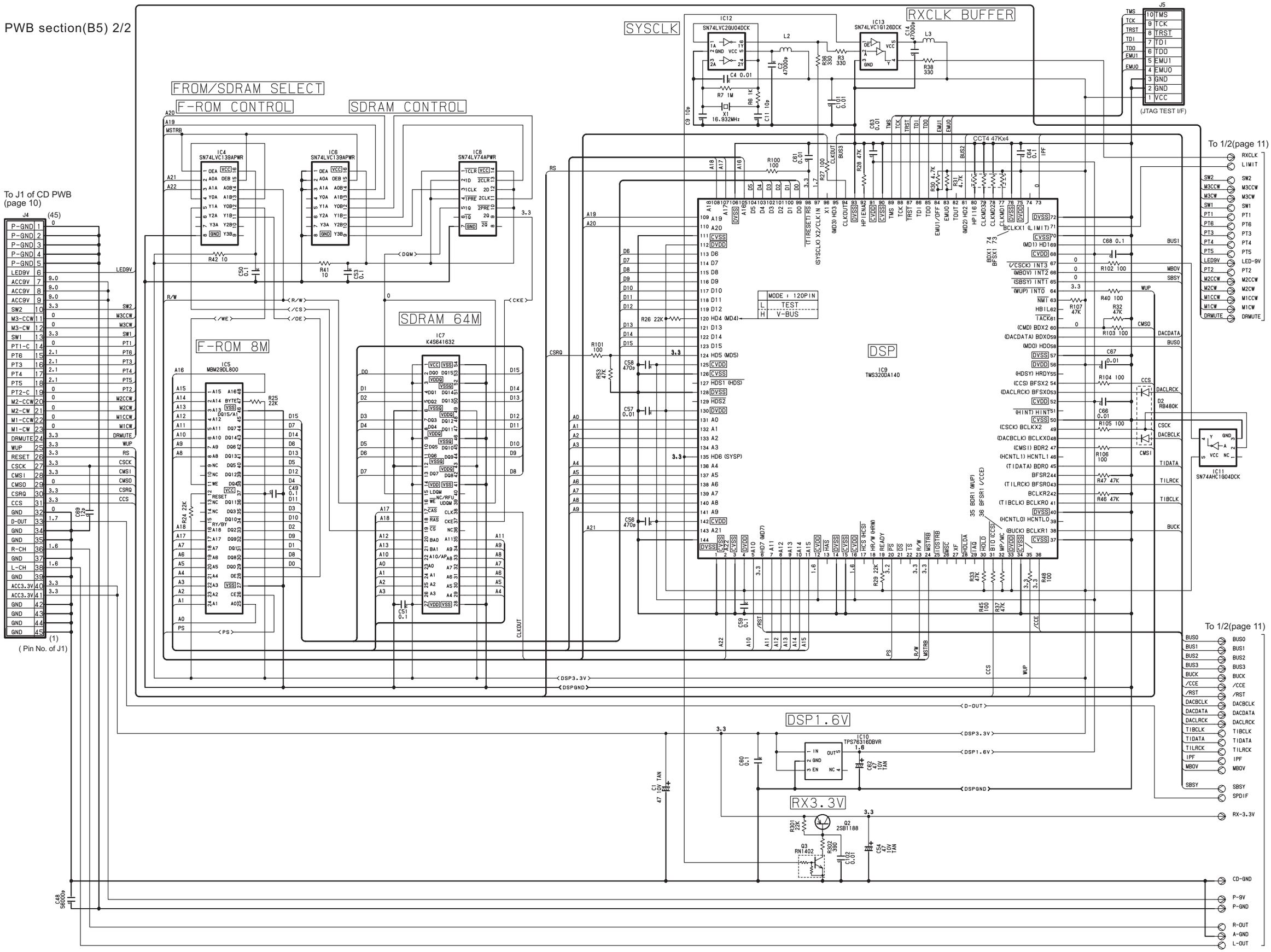
CD PWB section(B4)



DSP PWB section(B5) 1/2
MS-FPC section(B13)



PN-2714B-B

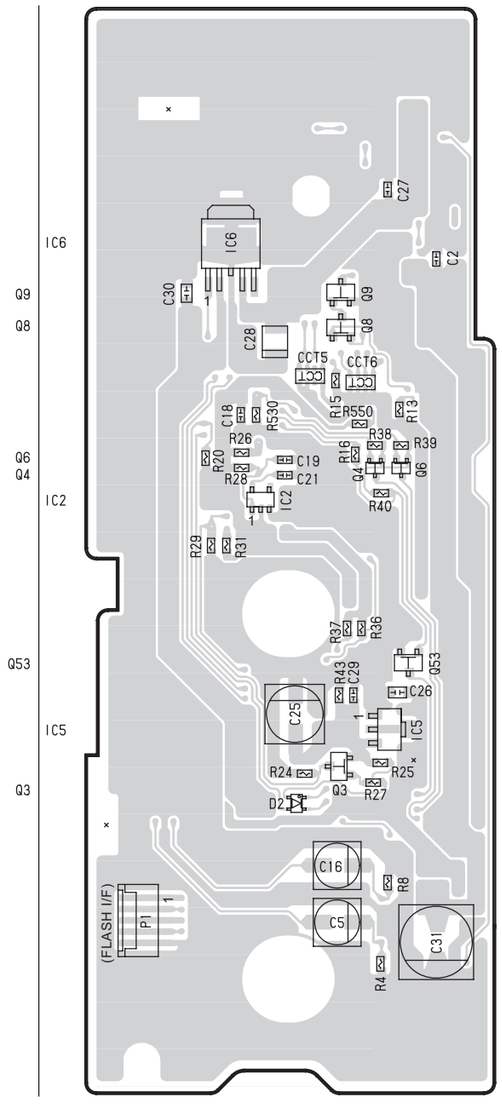

SYSCLK
RXCLK BUFFER
FROM/SDRAM SELECT
F-ROM CONTROL
SDRAM CONTROL
SDRAM 64M
F-ROM 8M
DSP
DSP1.6V
RX3.3V
IC12 SN74LVC2GU04DCK
IC13 SN74LVC1G126DCK
IC4 SN74LVC139APWR
IC6 SN74LVC139APWR
IC8 SN74LV74APWR
IC7 K4S641632
IC5 MBM29DL800
IC9 TMS320DA140
IC10 TPS76316DBVR
IC11 SN74AHC1G04DCK
J5
(JTAG TEST I/F)
J4
(45)
(1)
(Pin No. of J1)
To J1 of CD PWB (page 10)
To 1/2(page 11)
To 1/2(page 11)
CCT4 47Kx4
MODE : 120PIN
L TEST
H V-BUS
X1 16.932MHz
Q2 2SB1188
Q3 RN1402
D2 RB480K
P-GND
LED9V
ACC9V
SW2
M3-CCW
M3-CW
SW1
PT1-C
PT6
PT3
PT4
PT5
PT2-C
M2-CCW
M2-CW
M1-CCW
M1-CW
DRMUTE
WUP
RESET
CSCK
CMSI
CMSO
CSRQ
CCS
D-OUT
R-CH
L-CH
ACC3.3V
RXCLK
LIMIT
PT2
M2CCW
M2CW
M1CCW
M1CW
LED-9V
BUS0
BUS1
BUS2
BUS3
BUCK
/CCE
/RST
DACBCLK
DACDATA
DACLRCK
TIBCLK
TIDATA
TILRCK
IPF
MBOV
SBSY
SPDIF
RX-3.3V
CD-GND
P-9V
R-OUT
A-GND
L-OUT
DSP3.3V
DSPGND
DSP1.6V
RS
R/W
/WE
/CS
/OE
CKE
DQM
CSRQ
CCS
CLKOUT
BUS3
WUP
CMSO
CSCK
CMSI
DACDATA
DACLRCK
TIDATA
TILRCK
TIBCLK
BUCK
MBOV
SBSY
/CCE
/RST
PS
R/W
MSTRB

PN-2714B-B

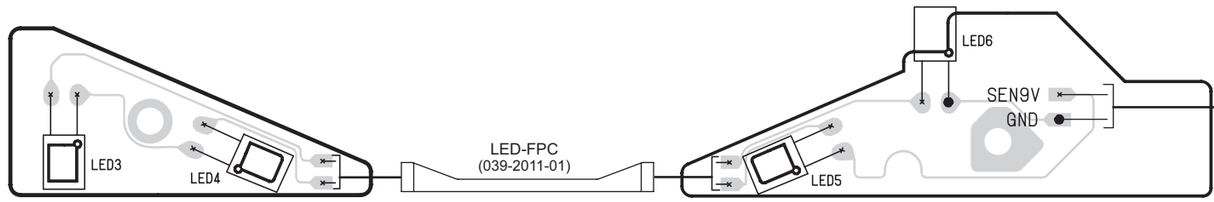
PRINTED WIRING BOARD

CD PWB section(B4)
DSP PWB section(B5)
Sensor PWB section(B6)
PIM-FPC section(B7)
Driver PWB section(B8)
PIV-FPC section(B9)
LED-L-PWB section(B10)
LED-R-PWB section(B11)
L-Motor-FPC section(B12)
M/S-FPC section(B13)

COMPONENT SIDE

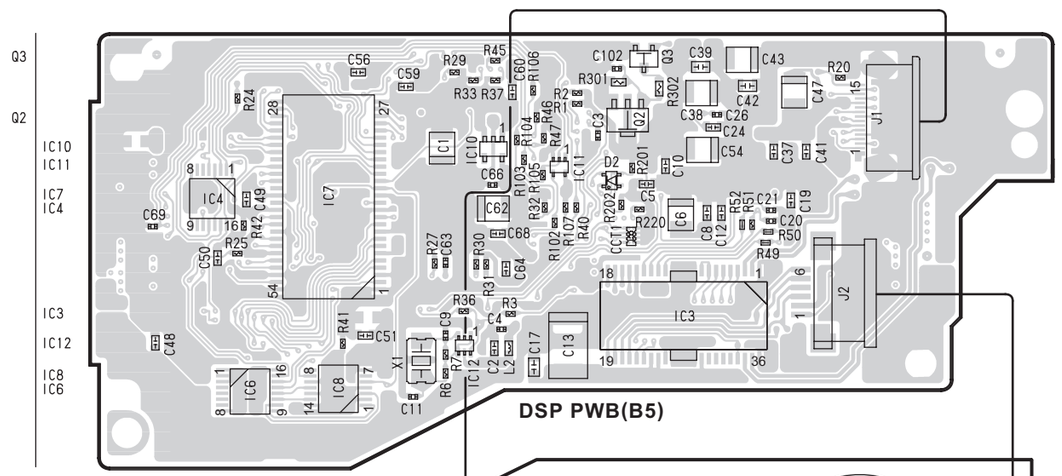


CD PWB(B4)

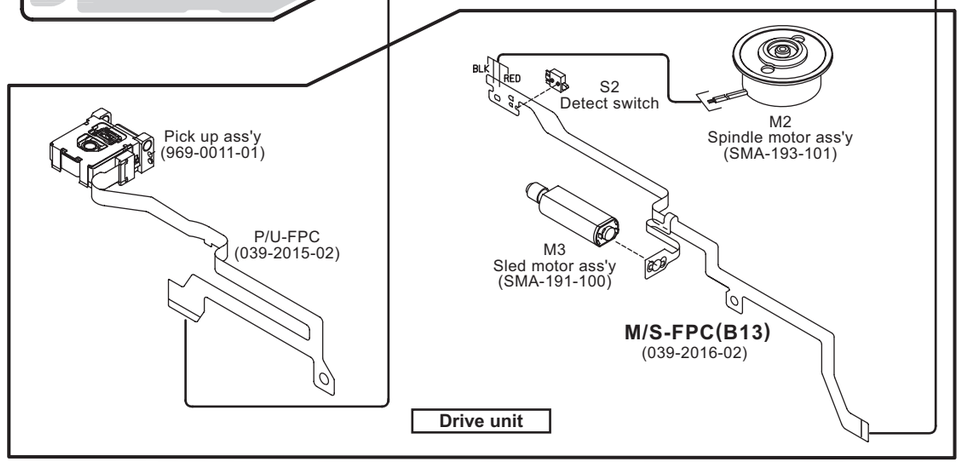


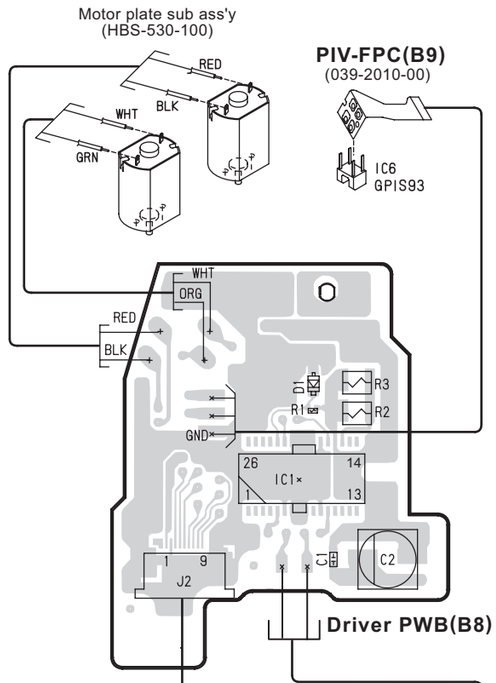
LED-L-PWB(B10)

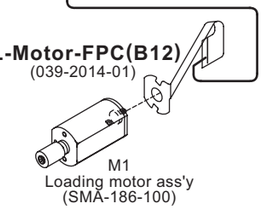
LED-R-PWB(B11)

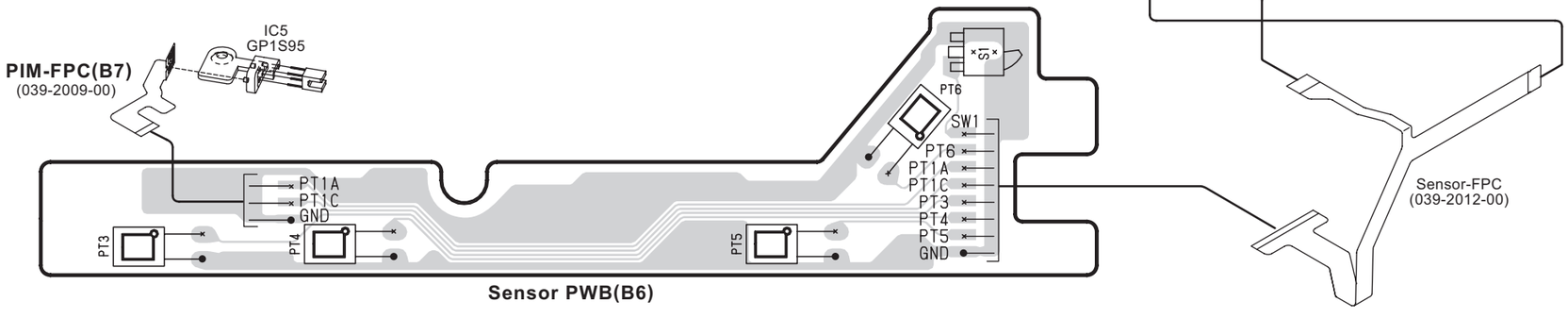


DSP PWB(B5)







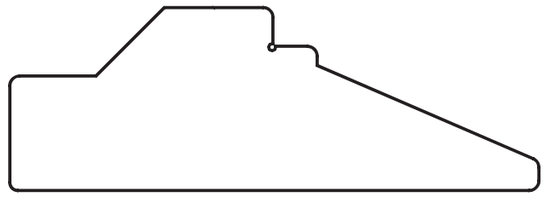


Sensor PWB(B6)

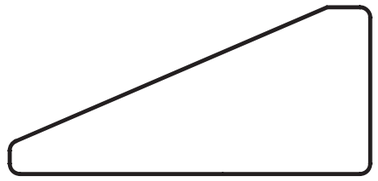
PN-2714B-B

CD PWB section(B4)
DSP PWB section(B5)
Sensor PWB section(B6)
PIM-FPC section(B7)
Driver PWB section(B8)
PIV-FPC section(B9)
LED-L-PWB section(B10)
LED-R-PWB section(B11)
L-Motor-FPC section(B12)
M/S-FPC section(B13)

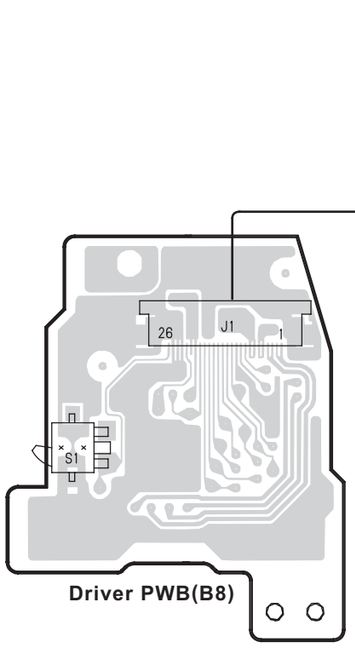
SOLDER SIDE



LED-R-PWB(B11)

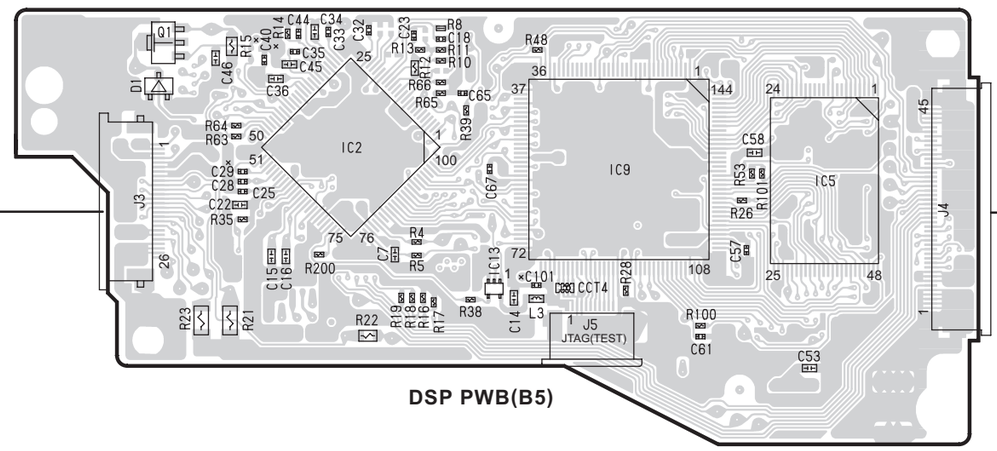


LED-L-PWB(B10)



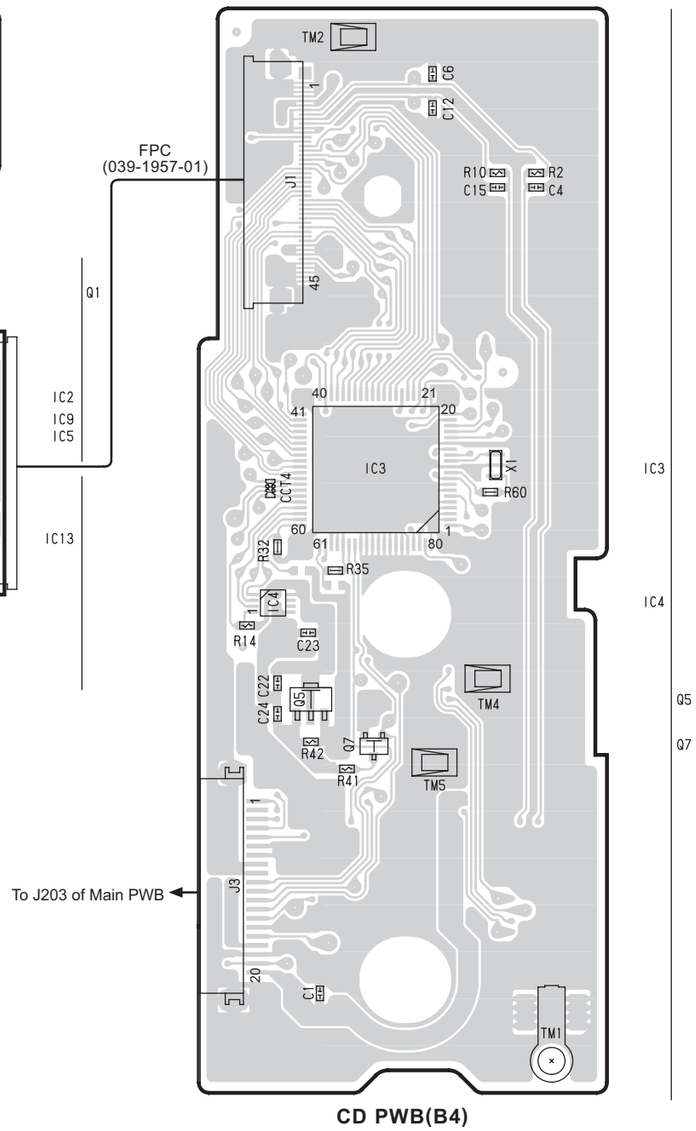
Driver PWB(B8)

MOS-FPC
(039-2013-04)

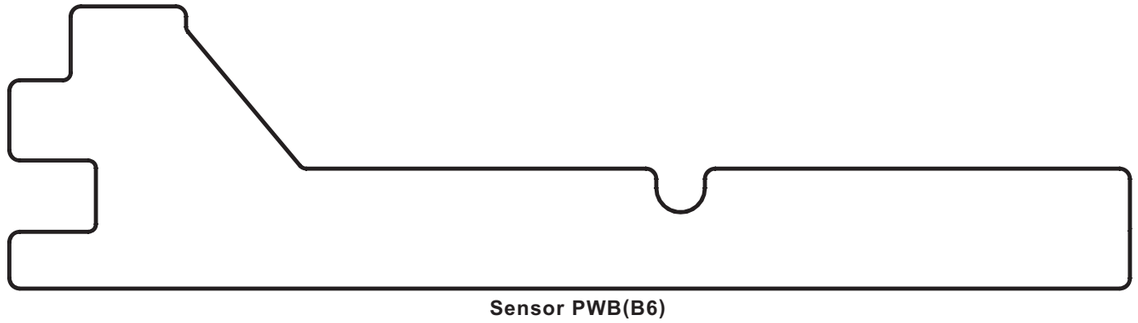


DSP PWB(B5)

FPC
(039-1957-01)



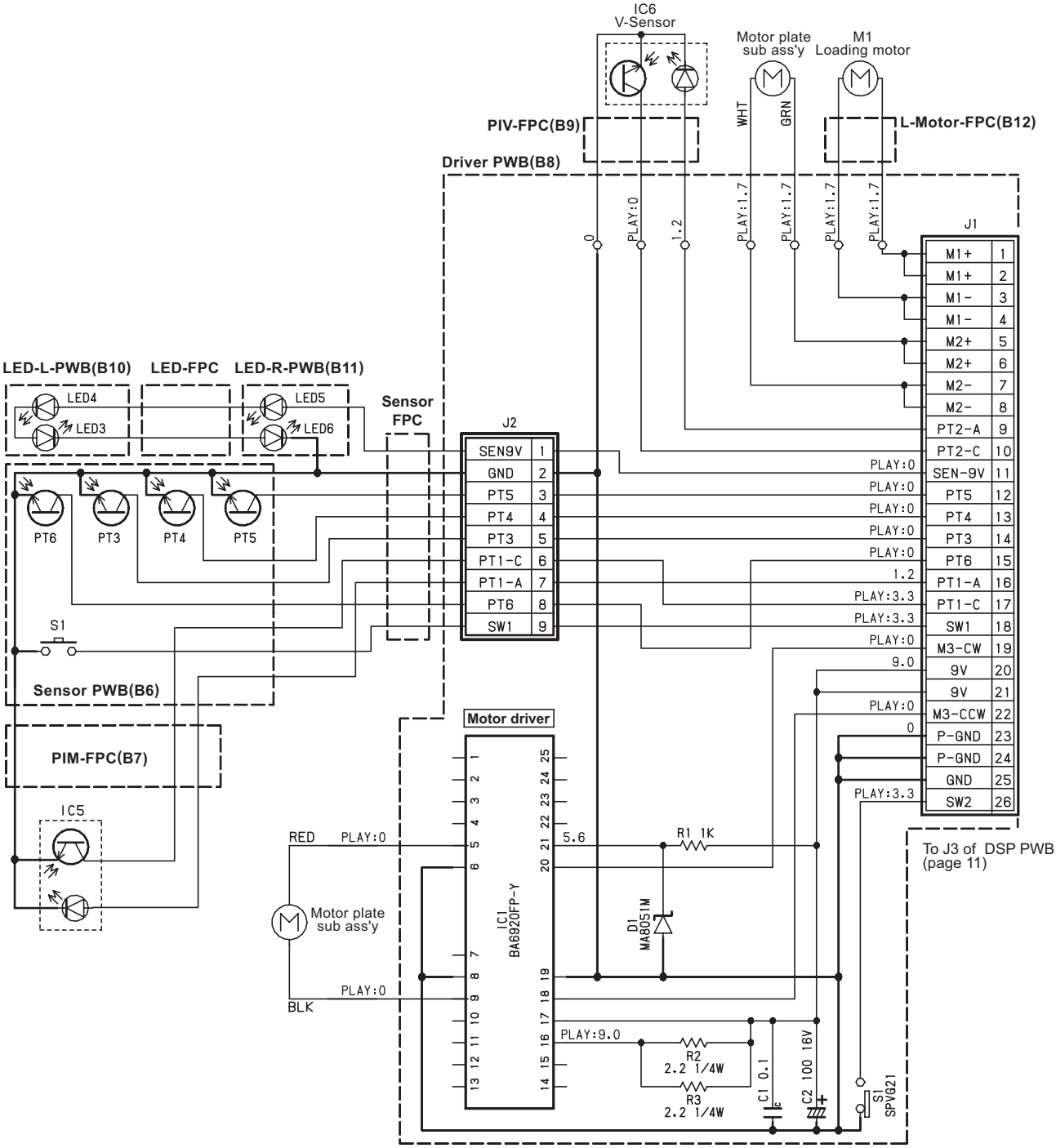
CD PWB(B4)



Sensor PWB(B6)

PN-2714B-B

Sensor PWB section(B6)
PIM-FPC section(B7)
Driver PWB section(B8)
PIV-FPC section(B9)
LED-L-PWB section(B10)
LED-R-PWB section(B11)
L-Motor-FPC section(B12)



PN-2714B-B